

PODCASTING IN KINDERGARTEN

Using Podcasting to Develop Voice-Print Match and Fluency in Kindergarten Readers

Mary E. Koch
Marian University, Fond du Lac, Wisconsin
St. Francis School District

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Abstract

This action research study investigated the effects of using podcasts to help beginning readers improve their reading accuracy, voice-print match accuracy, and reading fluency.

Kindergarten students listened to podcasts of nursery rhymes, while reading along with the book versions of the rhymes. Throughout the podcast, a teacher's voice coached the student, provided reminders specific to developing voice-print match skills, and modeled fluent reading. Data was collected using running records, a fluency rubric, a survey and researcher observations. Data was analyzed to determine if podcasting technology can be used effectively to supplement traditional classroom instruction for beginning readers.

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Introduction

Introduction and Identification of the Problem

Many people think of kindergarten as a place where children build with blocks, listen to stories, and finger paint. While kindergartners are certainly busy with blocks, books, and painting, they are also engaged in the important work of becoming readers and writers. In the 21st century, the expectations for kindergartners are high. By the end of the kindergarten year, students are expected to be proficient at many things: writing a story with complete sentences, using letters to represent sounds when spelling words, using pictures and phonics clues to decode unknown words in text, understanding concepts of print, demonstrating well-developed phonemic and phonological awareness, and reading and comprehending grade level texts. In a nutshell, the students are expected to leave kindergarten as readers and writers.

The process of becoming a reader and writer is incredibly complex. Unlike speech, reading and writing are not naturally occurring behaviors. They are learned behaviors that require both a set of discrete skills, and the ability to use those skills in a problem-solving process. Teachers encounter many challenges when trying to teach young children to read and write. Perhaps the biggest instructional challenge a teacher faces is that of limited time. In the day-in, day-out reality of the classroom, it seems like there is never enough time to provide all the instruction necessary to best promote each student's development as a reader and writer. While teachers do the best they can with whole group, small group and individual lessons, they are continually looking for ways to maximize the amount of time students are engaged in instruction and meaningful practice.

Learning centers, where small groups of students work independently on literacy activities, are one way to maximize the amount of time students spend on meaningful tasks. However, the time spent in learning centers is often lost instructional time. Because activities are too easy, or too difficult, it is easy for students to become distracted and disengaged. Furthermore, because the teacher is providing instruction to other students, the students in the learning center go without guidance and encouragement from a teacher. While considering ways to improve the effectiveness of learning centers, the researcher considered ways to use technology to incorporate more meaning, rigor, and a teacher presence into the centers.

One learning center found in many kindergarten classrooms is the listening center. At the listening center, students listen to a recording of a book while reading along with the actual book. While students enjoy going to the listening center, it is often a fairly passive activity. The researcher wondered how using podcasts could increase student engagement and make the time spent in the listening center more productive. This research investigates how listening to enhanced podcasts of stories affects the reading development of kindergarten students.

Purpose and Rationale

The researcher chose to study the effects of listening to podcasts of stories because podcasting technology offers many practical applications for learning centers. Podcasts are easy to create with free software and an inexpensive microphone. Once a story is recorded with the software, it can be included in the final podcast multiple times, therefore providing multiple opportunities for the student to read the text in a short period of time. Podcasts of stories can be enhanced with reminders, feedback, and encouragement from the teacher and virtually any book can be turned into an enhanced podcast. With six iPods and an assortment of enhanced podcasts,

many more opportunities are available each day for students to receive some guidance during their reading practice, even with the limited amount of time allotted for reading instruction.

The researcher predicted that students who practiced reading stories while listening to enhanced podcasts of the stories would improve their reading skills more than if they did not listen to the enhanced podcasts. At this stage of reading development, guided practice is important, and enhanced podcasts create another opportunity in the course of the instructional day for this type of practice. The researcher also predicted that using iPods would motivate students to practice their reading in a fun, enjoyable way. Practice is important when learning any new skill, and providing students with more than one way to practice makes it more likely that the practice will occur.

Kindergarten children have a lot of high expectations to meet by the end of their kindergarten year. They are capable of a great deal, yet still need much guidance and practice in order to be successful. Podcasting and iPods offer one way to provide students with more guidance and opportunity to practice reading, and the researcher expects that utilizing this technology in the classroom will increase students' reading skills.

Literature Review

Introduction

The purpose of this study was to investigate how iPods can be used to improve the reading skills of kindergarten students, especially in the areas of voice-print match and overall reading fluency. The researcher will begin by examining what the research has to say about learning to read in kindergarten. The researcher will then summarize research specific to the importance of voice-print match and fluency. Finally, the researcher will draw conclusions about the instructional implications of the research examined and how it relates to this study.

Teaching Reading in Kindergarten

Experts in the field have long recognized that young children are actively constructing a vast network of foundational reading knowledge in their early years (Adams, 1990, Chall, 1983, National Research Council Staff, 1998, Snow, Burns, & Griffin, 1998). By carefully cultivating and nurturing this knowledge, kindergarten teachers can have a lasting impact on their students. In her book *Kindergarten Literacy*, Anne McGill-Franzen cites multiple studies which demonstrate that teaching reading in kindergarten conveys long term benefits to students who receive that instruction. These students demonstrate higher achievement in reading, as well as higher overall achievement in school (McGill-Franzen, 2006). Quite simply, teaching reading in kindergarten, in a meaningful and effective way, is critical for children.

Yet teaching young children to read is a complex process, and not an exact science, by any means. The teacher of emergent readers is an alchemist of sorts, charged with helping students learn all the skills that go along with reading while also focusing on making meaning of the words and pictures on the page. This instruction occurs in a dynamic environment, and the teacher must constantly adjust the instruction to accommodate the changing and varied needs of the learners. Fortunately, there has been a tremendous amount of research published to guide the teacher, and this research has produced a widely agreed upon framework for reading instruction.

In 2000, the National Reading Panel published a report after a comprehensive review and analysis of research studies on reading. The report identified five key components of effective reading instruction: phonemic awareness, phonics, fluency, vocabulary, and comprehension. All of these components need to be addressed during reading instruction, and all are essential to the development of proficient readers (National Institute of Child Health and Human Development, 2000). Furthermore, the ability to read does not develop in a strictly linear path. Each of these

components of reading interacts with all the others, and learning to read becomes a deeply recursive experience (Indrisano & Chall, 1995).

The Importance of Voice-Print Match

Voice-print match means just what it says: one word is spoken for each word that appears on the page. While it may seem like a small thing, the ability of a beginning reader to be able to match voice with print carries tremendous implications. Without voice-print match, readers cannot use letter-sound relationships to identify unknown words, nor can they learn new sight words as they read (Morris, Bloodgood, Lomax, & Perney, 2003). Furthermore, research by Morris et al. (2003) and Uhry (2002) has shown that readers who have some understanding of voice-print match use this understanding to increase their phonemic awareness, and that this understanding also influences their ability to use invented spelling during writing time. In turn, phonemic awareness and invented spelling serve to further solidify understanding of voice-print match, and as readers become more and more skilled in all areas, it becomes a self-extending system.

The Importance of Fluency

The ultimate goal of reading is to make meaning out of print, to comprehend the written word. According to Nichols, Rupley and Rasinski (2009, p. 4), “Fluency is the gateway to comprehension.” Fluency allows the reader to recognize words accurately and automatically so that maximum attention can be devoted to the meaning. Although the National Reading Panel identified fluency as an often neglected part of reading instruction, over the years, fluency has surfaced in the reading research as an important part of reading instruction. Samuels discussed repeated readings as a method to build fluency in the 1970’s (Samuels, 1979), Allington

identified fluency as a neglected goal in reading instruction in the 1980's (Allington, 1983), and Rasinski began publishing his research on fluency in the 1990's (Rasinski, 1990).

Nichols, Rupley and Rasinski (2009) identified several factors that are part of good fluency instruction. First and foremost, children must have a model of fluent reading. They must be able to hear what fluent reading sounds like before they can practice it themselves.

Additionally, fluency cannot be taught as an isolated skill. Fluency instruction has to occur in the context of meaningful text. Readers need specific instruction on aspects of fluency and the time to practice their skills while reading connected text at an independent or instructional level.

Multiple studies have identified several teaching strategies for building fluency in readers (National Institute of Child Health and Human Development, 2000, Nicholas, Rupley, & Rasinski, 2009). The strategy employed in this study is based on a strategy identified in the National Reading Panel's report as guided, repeated oral reading. According the report, "Guided, repeated oral reading encourages students to read passages orally with systematic and explicit guidance and feedback from the teacher." (National Institute of Child Health and Human Development, p. 12). According to the panel, this type of practice can positively influence word recognition, reading fluency, and comprehension for all readers in a way that silent, independent reading cannot.

Conclusion

The research makes it clear that the five components of reading are interconnected and influence one another in powerful ways. Given that, it seems essential to the researcher that all five components are given equal time over the course of reading instruction. It is the experience of the researcher, however, that reading instruction in kindergarten does not take full advantage of these connections and the positive influence they can have on one another. Based on the

research on voice-print match, it seems that developing more strategies for helping students solidify their understanding of voice-print match would reap benefits in many areas of development for beginning readers. Furthermore, because fluency provides a critical link to comprehension, it seems that fluency instruction and opportunities for practice designed to develop fluency needs to be assigned a higher priority when planning reading instruction. Technology offers many ways to introduce new teaching strategies into the mix, and the researcher believes that iPods and enhanced podcasts show promise in this area.

Design of the Study

In this study, the researcher investigated how listening to enhanced podcasts of nursery rhyme stories affected kindergarten students' reading skills. In particular, the researcher investigated how enhanced podcasts could provide students with the scaffolding needed to develop their finger-point reading skills, and the modeling needed to improve their overall reading fluency. The researcher was also interested in learning more about students' attitudes towards using the iPods in a learning center.

Context

This study took place in a K5 classroom in a suburban elementary school. In addition to traditional early literacy instruction, students used iPods in a learning center to listen to enhanced podcasts of stories, while reading along in a book. While the iPod learning center is similar to a traditional listening center used in many elementary classrooms, it differs in several important respects. Rather than listening to a story once, the podcast offered the students multiple opportunities to hear and read the text in a short amount of time. Because the podcast is enhanced with a teacher's voice, the experience is more interactive than the relatively passive experience of the traditional listening center. Throughout the podcast, a teacher's voice

encourages students to engage with the text through reminders and coaching specific to developing finger-point reading skill and overall reading fluency. The student is also invited to read along in a quiet reading voice during the final read of the story, again encouraging the student to engage with the text in a meaningful way.

Participants

This action research took place at Willow Glen Primary School. Willow Glen is a public, K-3 school located in St. Francis, Wisconsin. The participants in the study were 10 students in one K5 classroom. Willow Glen has a population of 312 students. The majority of the students are White, while the remaining 22.2% belong to a minority group (Asian, Black/Not Hispanic, Hispanic, and American Indian). 11.2% of the student population is identified as disabled, 9% of the student population has limited proficiency with English, and 27.6% of the students qualify for subsidized lunch.

The nature of this study exposed students to a minimal risk that their confidentiality might be breached. To protect students' identities, data collection forms were coded and the list of codes was kept in a locked classroom separate from the forms. Furthermore, all identifiers and codes were removed before the data was analyzed and disseminated. In addition to measures designed to protect student confidentiality, the researcher took other steps to ensure the research was conducted in an ethical manner. Prior to commencing the study, the researcher completed CITI training and received approval from the Institutional Review Board (IRB) of Marian University (Appendix A). The principal of Willow Glen Primary School approved the research project (Appendix B), parental consent was obtained (Appendix C), and students were informed of and assented to participating in the project (Appendix D).

Instruments

The researcher used four instruments to collect data: running records, reading fluency rubrics, student attitude surveys, and a researcher's field journal. Running records were used to assess reading accuracy and voice-print match accuracy. A running record is an assessment instrument used by the teacher to record a student's reading behavior while the student is reading authentic text. As the student reads, the teacher sits beside the student and marks a running record form. A check mark is used to indicate a word read correctly and a dash is used to indicate that the student skipped the word. Substitutions (reading one word for another) and self-corrections are also noted on the running record form. A running record form (Appendix E) was developed by the researcher based on a blank form from Reading A to Z (www.readinga-z.com) and pre-typed text. In addition to the standard notations used during a running record, the researcher recorded voice-print match accuracy by circling each word the student pointed to and read at the same time.

Reading fluency was assessed using the Multidimensional Fluency Rubric (Appendix F), developed by Timothy Rasinski. (<http://www.timrasinski.com>) The Multidimensional Fluency Rubric is a tool used by teachers to assess fluency in an objective way. The rubric addresses four dimensions of fluency: expression and volume, phrasing, smoothness, and pace. When assessing fluency, the teacher listens to the student read from an authentic text, and then rates the student's reading in each dimension, on a scale of one to four. An overall score represents a total of the scores for each dimension. The total fluency score can range from four to sixteen, while a score of ten or more indicates that the student is making good progress with fluency.

A survey (Appendix G) was used to assess students' attitudes towards using the iPods. The researcher developed the age-appropriate survey and administered it during a face-to face interview with each student. The survey asked students to respond to questions about using the

iPods and whether or not they felt the teacher prompts embedded in the podcast were helpful. In addition to collecting objective quantitative and qualitative data, the researcher kept descriptive field notes in a journal during the course of the study.

Procedure

This study took place over a three week time span, and was divided into two phases. During Phase 1, students received six days of typical classroom literacy instruction. At the end of the first phase, students' reading was assessed to determine a baseline measurement of reading skills. During Phase 2, the treatment variable was added. In addition to six days of typical classroom literacy instruction, listening to an enhanced podcast of the story in the iPod learning center was added as an instructional strategy. At the end of the second phase, students' reading was assessed again. Additionally, a student attitude survey was administered.

During Phase 1, students received instruction targeted at developing reading fluency and voice-print match skills. A nursery rhyme in book form was used as the instructional text. Instruction included whole-group shared reading lessons using a big book version of the nursery rhyme, as well as small-group instruction. During shared reading, the researcher modeled finger-point reading and fluent reading. During small-group instruction, students received additional coaching on finger-point reading, and had opportunities to practice reading the text using echo reading and choral reading strategies.

During Phase 1, students also participated in small group lessons to learn how to use the iPods and learn the routines associated with the iPod listening center. Following the iPod lessons, they practiced using the iPods by listening to podcasts from Hooked on Phonics and Sesame Street. The use of the iPod listening center during Phase 1 was strictly focused on learning to use the iPods, and students did not have access to any enhanced podcasts during this first phase.

At the conclusion of the six days of instruction, the researcher assessed the students' reading behavior by listening to each student's oral reading of the instructional text. A running record was used to evaluate reading accuracy and voice-print match accuracy. Reading accuracy was calculated as a percentage based on the following formula:

$$\frac{\text{total words read correctly}}{\text{total words in book}} = \text{reading accuracy}$$

Voice-print match accuracy was also calculated as a percentage based on the following formula:

$$\frac{\text{total words pointed to and read with voice match}}{\text{total words in book}} = \text{voice - print match accuracy}$$

The researcher used the Multidimensional Fluency Rubric to evaluate reading fluency. Students were given a score of 1 to 4 for each of the following aspects of fluency: expression and volume, phrasing, smoothness, and pace. Scores for each dimension were added together to arrive at a total fluency score.

During Phase 2, the researcher used a different nursery rhyme book for the instructional text. Whole-group instruction remained the same, with the researcher doing shared reading lessons using a big book version of the nursery rhyme. During shared reading, the researcher modeled finger-point reading and fluent reading. Small-group instruction changed during Phase 2. During small-group instruction, the iPod was introduced as a new tool for practicing reading. Students listened to an enhanced podcast of the nursery rhyme story, while reading along in the book, at an iPod learning center. Each time they listened to the podcast, they had the opportunity

to practice reading the story three times. Students visited the iPod learning center three times over the course of Phase 2.

At the end of Phase 2, the researcher assessed students' reading behavior again, by listening to each student's oral reading of the instructional text used in Phase 2. The researcher took a running record to evaluate reading accuracy and voice-print match accuracy. The researcher also used the Multidimensional Fluency Rubric to evaluate students' reading fluency. Total scores for reading accuracy, voice-print match accuracy, and fluency were calculated in the same way that they were calculated for Phase 1.

In addition to evaluating students' reading skills, the researcher also administered a student attitude survey at the end of Phase 2. Students completed the survey in conjunction with an individual interview with the researcher. After answering a practice question, the students rated four aspects of using the iPod learning center: experience using the iPod, helpfulness of listening to an audio version of the story, effectiveness of teacher coaching on finger-point reading, and effectiveness of listening to an audio version of the story on student's perception of reading skill. Students had three choices to answer each question: agree, don't know, or disagree. A Likert scale was used to score the survey as follows: 3 (agree), 2 (don't know), and 1 (disagree). Results from the surveys were compiled in two ways. Each student's survey was given an overall score, and an average score was calculated for each item based on all student responses.

Findings and Conclusions

This study investigated how enhanced podcasts can be used to improve the reading skills of kindergarten students. Quantitative data measuring students' reading accuracy, voice-print match accuracy, and reading fluency, was collected before (Phase 1) and after (Phase 2) the

students used enhanced podcasts as an instructional strategy. Qualitative data was also collected during the study. Students' attitudes towards using the podcasts were measured using a survey with a Likert scale. The researcher also recorded observations in a field journal over the course of the research period pertaining to the use of podcasts and iPods in the classroom, as well as behaviors observed while students were using the iPods.

Before the data was analyzed, several steps were taken to ensure the confidentiality of the students participating in the study. All the data sheets for each student were grouped together. The student identification code on each data collection sheet was obscured with opaque, removable tape and copies were made for use in the data analysis phase. The coded originals were retained in a file, in a locked classroom, separate from the list of student codes. The researcher then selected each student's set of data sheets at random and assigned a generic identification number for data analysis purposes. This process ensured that no information identifying a particular student would be revealed during the data analysis or dissemination of the data.

Once the data was collected, it was analyzed in several different ways. The researcher calculated mean scores for reading accuracy, voice-print match accuracy, and reading fluency using the data sets from Phase 1 and Phase 2. After noting a large increase in the mean reading fluency score between Phase 1 and Phase 2, the researcher did further analysis and calculated mean scores for each of the dimensions of fluency, both before and after the students used the enhanced podcast strategy. An independent paired t-test was then performed for each set of parametric data (reading accuracy, voice-print match accuracy, total reading fluency, dimensions of fluency) to determine whether or not the differences between Phase 1 results and Phase 2 results were statistically significant.

Quantitative Data

Each student's reading was assessed using a running record and the Multidimensional Fluency Scale at the end of Phase 1 to establish baseline reading scores. (Appendix H) Table 1 shows the results of the first round of assessments for each student. The Reading Accuracy score represents the percentage of words read correctly. The range was 0% to 100%, with a mean of 84%. The Voice-Print Match (VPM) Accuracy score represents the percentage of words that the student pointed to and read correctly at the same time. The VPM range was 21% to 100%, with a mean of 70%. Finally, the Fluency score represents the total of scores for the four dimensions of fluency (expression and volume, phrasing, smoothness, and pace), where the highest possible score is 16. Fluency scores ranged from 5 to 12, with a mean of 8.

Table 1

Phase 1 Individual Student Reading Scores

Student	Reading Accuracy	VPM Accuracy	Fluency
S1	0%	21%	5
S2	93%	100%	7
S3	97%	55%	8
S4	72%	21%	7
S5	100%	100%	8
S6	93%	79%	7
S7	97%	100%	12
S8	100%	83%	11
S9	90%	40%	8
S10	100%	100%	8
Mean	84%	70%	8

At the end of Phase 2, each student's reading was assessed again using a running record and the Multidimensional Fluency Scale. (Appendix G) Table 2 shows the results of the second round of assessments for each student. The Reading Accuracy scores ranged from 47% to 100% with a mean of 88%. The Voice-Print Match Accuracy (VPM) scores ranged from 13% to 100% with a mean of 51%. Finally, the Fluency scores ranged from 7 to 14 with a mean of 11.

Table 2

Phase 2 Individual Student Reading Scores

Student	Reading Accuracy	VPM Accuracy	Fluency
S1	70%	13%	10
S2	100%	93%	13
S3	93%	97%	9
S4	47%	27%	8
S5	100%	23%	11
S6	77%	80%	7
S7	100%	33%	14
S8	97%	20%	14
S9	100%	23%	8
S10	100%	100%	13
Mean	88%	51%	11

After analyzing the data from running records and the Multidimensional Fluency rubric, the researcher compared student results from Phase 1 to Phase 2. Figure 1 shows a comparison of each student's reading accuracy before and after using the enhanced podcast as an instructional

strategy. While the mean reading accuracy score increased by 4%, the graph shows that results varied considerably from student to student and not all students showed an increase in reading accuracy.

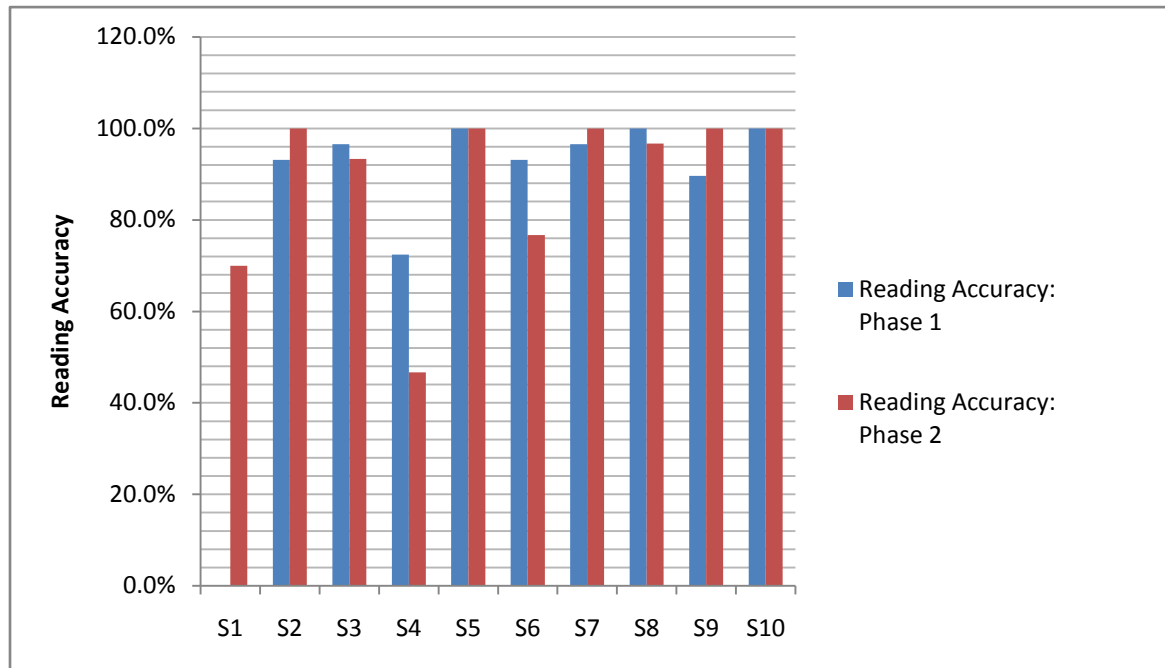


Figure 1 *Comparison of reading accuracy between Phase 1 and Phase 2*

Figure 2 shows a comparison of each student's voice-print match accuracy before and after using the enhanced podcast as an instructional strategy. While the mean voice-print match accuracy decreased by 16%, the graph shows that results varied considerably from student to student. Some students showed an increase in voice-print match accuracy while some students showed a decline in voice-print match accuracy. These results need to be considered carefully, given what the research has to say about the importance of voice-print match in overall reading development. Morris et al. (2003) and Uhry (2002) both acknowledge the importance of this skill in the development of many other components of emergent reading (i.e. phonemic awareness,

invented spelling) and teachers of emergent readers must ensure that all students develop mastery over this important skill.

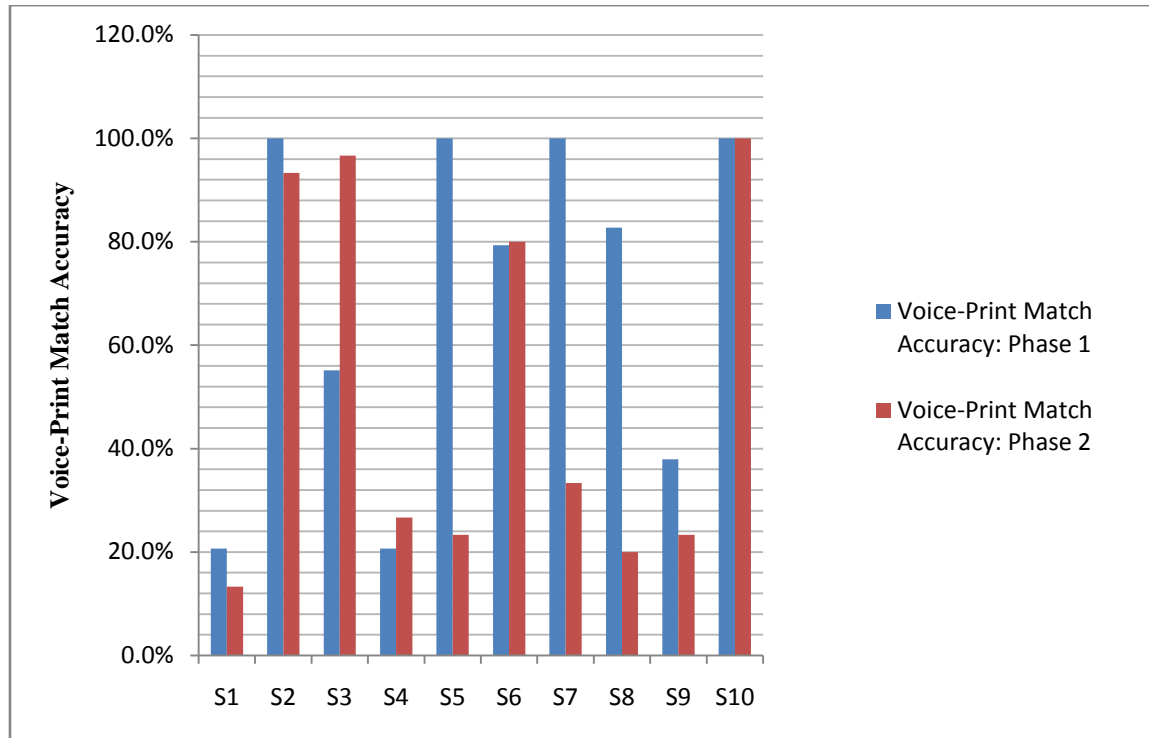


Figure 2 *Comparison of voice-print match accuracy between Phase 1 and Phase 2*

While reading accuracy and voice-print match accuracy were assessed using a single measure, the students' reading fluency was measured using a rubric with four sub-categories: expression and volume, phrasing, smoothness, and pace. Figure 3 shows a comparison of the mean score for each dimension of fluency, before and after the use of an enhanced podcast as an instructional strategy. These results confirm what researchers have found about reading to fluency. According to Nichols, Rupley and Rasinski (2009), in order for readers to develop as fluent readers, they need to have models of fluent reading as well time to practice in the context

of meaningful, authentic text. When looking at Figure 3, it appears that listening to a model of fluent reading did help students improve their phrasing, smoothness, and pace.

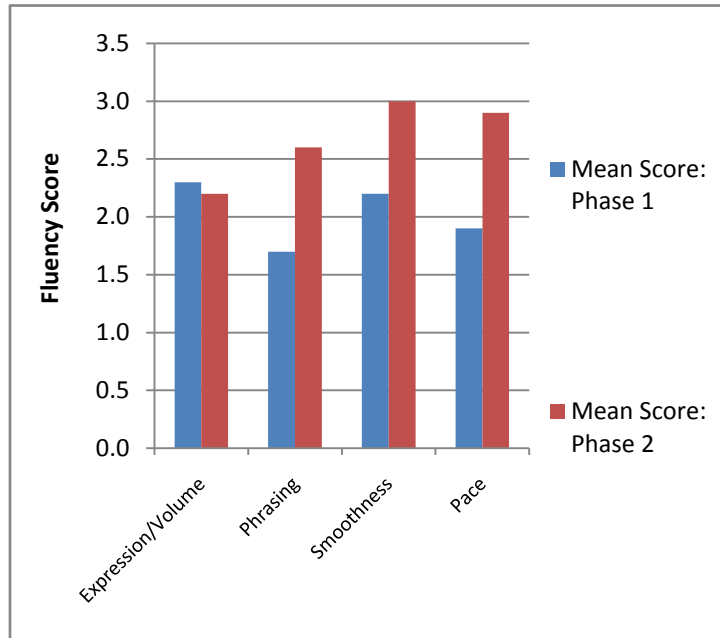


Figure 3 *Comparison of mean fluency dimension scores between Phase 1 and Phase 2*

Qualitative Data

At the end of Phase 2, each student completed an attitude survey (Appendix J). The survey was designed to determine students' attitudes towards four aspects of using the iPod learning center: experience using the iPod, helpfulness of listening to an audio version of the story, effectiveness of teacher coaching on finger-point reading, and effectiveness of listening to an audio version of the story on student's perception of reading skill. Students had three options for response: agree, disagree, or don't know. A Likert scale was used to score the survey as follows: 3 (agree), 2 (don't know), and 1 (disagree). Each survey was scored individually to

determine a total score for each student, and these results are shown in Table 3. The scores ranged from 4 to 12, with a mean of 11.

Table 3

Student Attitude Survey Scores

Student	Total Score
S1	11
S2	12
S3	12
S4	12
S5	12
S6	12
S7	12
S8	12
S9	12
S10	4
Mean	11

Additionally, each item on the survey was analyzed on an individual basis. The individual student responses for each item were totaled, and a mean score for each item was calculated. Table 4 shows the mean score for each individual survey item. Mean scores for each survey item varied only slightly, from 2.7 to 2.8.

Table 4

Mean scores for student survey responses per survey statement

Survey Statement	Mean Score
I liked listening to the stories on the headphones.	2.8
I liked having my teacher's voice help me read the stories.	2.7
My teacher's voice helped me to remember to point to the words on the page.	2.8
Listening to stories on the headphones helped me be a better reader.	2.8

In addition to the student attitude survey, the researcher also collected observations in a field journal (Appendix K). Observations in the field journal fell into two categories: practical applications of using the iPods in a listening center, and student behaviors and attitudes. The students learned how to use the iPods with a limited amount of instruction and quickly began to help each other out with technical problems. By the last day of the study, the students were using the iPod listening center independently, and the researcher only received three student requests to provide technical support. A few technical glitches were reported by the researcher (e.g. dead batteries), however the researcher observed that using the iPods did not take an inordinate amount of preparation or maintenance time.

During Phase 2, students used the iPod listening center to practice their reading on three separate occasions. While listening to the podcast, the students were being prompted throughout the podcast to engage in finger-point reading. They were also prompted to read along in a quiet reading voice before the third reading of the story. On the students' third day at the listening center, the researcher observed the student's use of finger point reading and oral reading. 3 out of the 10 students, or 30%, exhibited finger-point reading behaviors and 6 out of the 10 students, or 60%, were observed reading along out loud while listening to the podcast. The researcher found these results to be disappointing, given the importance of finger-point reading and voice-print match skill, as identified in research on reading development.

Student attitudes toward the iPods were observed to be overwhelmingly positive. During informal reflection times at the end of center time, students reported positive attitudes towards the iPod listening center. During one reflection period, all 10 students reported that they liked the iPod center, and all 10 reported liking the video podcasts. During another informal reflection

time, the students had a discussion, led by the researcher, about the iPod listening center. Table 5 shows a sample of comments the students made when discussing the iPod listening center.

Table 5

Sample student responses during a classroom discussion

Question: How do the iPods help you learn about reading?	
“helping us read”	
“help us read books”	
“help us know other words”	
“the songs help us learn”	

Conclusions

Two general predictions were made at the beginning of the study. The researcher predicted that students who practiced reading stories while listening to enhanced podcasts of the stories would improve their reading skills more than if they did not listen to the enhanced podcasts. The researcher also predicted that the use of iPods would motivate students to practice their reading by giving them a fun, enjoyable way to practice. Based on the quantitative data collected during the study, no general conclusions can be reached regarding the prediction related to improving reading skills. While reading accuracy and voice-print match accuracy were not significantly affected by the use of the enhanced podcast strategy, the findings indicate that the strategy positively affected reading fluency. Based on the qualitative data collected, the researcher concluded that the use of iPods was well received by the students and the enhanced podcasts and iPods did increase student motivation and enjoyment during reading practice times.

When the researcher examined data related to reading accuracy, a 4% increase in the mean reading accuracy score was reported. While the mean score showed an increase after the use of the enhanced podcast strategy, based on the results of an independent paired t -test ($t(9)=0.52, p=0.61$), the researcher concluded that the increase was not statistically significant and could not be attributed to the use of the enhanced podcast strategy. Many other factors could have influenced the results, including the difficulty of the texts used and the students' familiarity with the texts. Further research into the use of the enhanced podcast strategy to improve reading accuracy would be necessary to more fully explore the effectiveness of the strategy.

When the researcher examined the data related to voice-print match accuracy, a 16% decrease in the mean voice-print match accuracy score was reported. This was not surprising when observational data was also considered. While observing students use the iPod listening center to listen to the enhanced podcast, the researcher noted that only 30% of the students were using their finger to read, even though they were instructed to do so while listening to the podcast. Students were monitored in their use of finger-point reading during small group instruction in Phase 1, but they did not receive this type of monitoring in Phase 2. The lack of direct teacher monitoring in Phase 2 likely resulted in less finger-point reading and decreased voice-print match accuracy.

Even though there seems to be a connection between teacher monitoring of finger-point reading and voice-print match accuracy, the researcher applied statistical analysis to the data in order to remain consistent with the rest of the data analysis. Based on the results of an independent paired t -test ($t(9)=1.56, p=0.15$), the researcher concluded that the decrease was not statistically significant. Although the data showed a marked decrease in voice-print match accuracy, the decrease cannot be attributed to the use of the enhanced podcast strategy. That

being said, because the body of reading research demonstrates the importance of voice-print match accuracy, the researcher concluded that the use of the enhanced podcast strategy to improve voice-print match skills is not a viable option. When beginning readers have accurate voice-print match skills, they are able to extend their phonemic awareness, use letter-sound relationships to decode unknown words, and learn new sight words as they read (Morris et al., 2003). These are all critical components of beginning reading and teachers of beginning readers are obligated to use only those instructional techniques that ensure the successful development of voice-print match accuracy.

Despite the fact that the enhanced podcast strategy proved to be ineffective at improving reading accuracy and voice-print match accuracy, it proved to be quite effective at improving reading fluency, especially the fluency components of phrasing, smoothness, and pace. When the researcher examined the data related to overall reading fluency, an increase of 2.6 points in the mean score for overall reading fluency was reported. Based on the results of an independent, paired t -test ($t(9)=3.79$, $p=0.0043$), the researcher concluded that the increase was statistically significant and could be attributed to the use of the enhanced podcast strategy.

The researcher reached the same conclusion after examining the data related to three specific fluency components. In each case, an increase in the mean score was reported following the use of the enhanced podcast strategy. The mean score for phrasing increased by 0.9 points, the mean score for smoothness increased by 0.8 points, and the mean score for pace increased by 1.0 points. Based on the results of independent, paired t -tests for phrasing ($t(9)=2.86$, $p=0.02$), smoothness ($t(9)=4.00$, $p=0.0031$), and pace ($t(9)=3.35$, $p=0.0085$), the researcher concluded that the increase in each score was statistically significant and could be attributed to the use of the enhanced podcast strategy. These results are not surprising when the body of research on reading

fluency is taken into account. Numerous studies by Samuels (1979), Allington (1983) and Rasinski (1990) have shown that when readers are repeatedly exposed to models of fluent reading, their fluency increases. The data collected in this study simply confirm what other research has already shown. Given the importance of fluency to comprehension (Nichols, Rupley, and Rasinski, 2009), the researcher believes that the development of reading fluency should begin as soon as students begin to learn to read, and not be delayed until they are more accomplished readers.

Although the quantitative data showed mixed results, the qualitative data collected during the study was overwhelmingly positive. Based on the results of the attitude survey the researcher concluded that the students liked using the iPods for reading practice and believed that the enhanced podcast strategy provided guidance and help during a practice session. Before the study began, the researcher predicted that the iPod listening center would provide students with an incentive to practice their reading. Data was not collected specifically to support or refute this prediction, however the attitudes of the students suggested a high degree of interest and engagement with the center, which makes it much more likely the center would be used on a regular basis and more reading practice would occur.

Based on many observations recorded in the field journal during the study, the researcher made several conclusions regarding students using the iPods and the practical aspects of utilizing an iPod listening center. When introducing any new technology into the classroom, there are always concerns regarding the usability of the technology. Observational data collected during the study indicated that the students had very little difficulty using the iPods and the majority of students were adept at helping each other out with technical difficulties. The researcher concluded that the iPod listening center has a high degree of usability in a kindergarten

classroom and offers much promise in regards to providing opportunities for reading practice. The observational data also indicated that the researcher had little difficulty with setting up the iPod listening center. It was easy to download content onto the iPods and the amount of preparation time devoted to the process was negligible. Although several small glitches were encountered, they were all easily remedied. The researcher concluded that the iPod listening center has a high degree of usability in a kindergarten classroom for the teacher as well.

The researcher's overall conclusion is that enhanced podcasts, used in an iPod listening center can have a positive effect on students' reading development. Although the enhanced podcast strategy did not prove to be an effective way to help develop voice-print match accuracy or overall reading accuracy, the strategy did prove to have a positive influence on a reader's fluency. The data revealed that students had positive feelings toward the listening center and the researcher concluded that the positive feelings and high level of interest made the iPod center a place where students wanted to come and practice their reading.

Reflection and Action Plan for Educational Change

This action research project investigated how listening to enhanced podcasts of stories affected kindergarten students' reading skills. The researcher collected data on overall reading accuracy, voice-print match accuracy, and reading fluency. The researcher also collected qualitative data regarding students' attitudes towards listening to podcasts and using the iPods in a learning center. The researcher expected to find that students' reading accuracy and voice-print match accuracy increased after receiving coaching during the enhanced podcast, that students' reading fluency increased after repeatedly listening to and reading the story, and that students enjoyed using the iPods and felt that the enhanced podcasts were helpful to them. While the researcher attempted to remain objective throughout the study, the researcher's personal opinion

is that iPods show tremendous promise in the area of teaching students how to read and helping them become more effective readers.

Reflection

Overall, this action research project was a success. Because of this project, the researcher now has a fully operational iPod listening center in the classroom that the students use every day. While successful, the researcher did encounter several challenges during the study. Getting consent forms back from students required a good deal of follow-up and delayed the start of the data collection period slightly. A high number of student absences early on in the project also delayed the start date for commencing the research. Though technical difficulties were relatively minor, producing an enhanced podcast for the students to use was much more time consuming than was originally planned.

Fortunately, these challenges affected the researcher and not the students. In terms of challenges and successes with the students, perhaps the most successful part of the project was the rapid and easy integration of the iPod listening center into the classroom. The students had almost no trouble learning how to use the iPods, and quickly became accustomed to using them independently during learning center time. To add to the success of the research, the students showed great enthusiasm for the iPods and the enhanced podcasts. Furthermore, while their voice-print match accuracy did not increase as the researcher had predicted, their reading fluency increased dramatically, well beyond the researcher's expectations. Because fluency is so closely tied to comprehension, this is a welcome outcome.

The researcher had several assumptions at the beginning of the research that did not turn out to be true. The researcher assumed that all the students would be able to easily follow along with the enhanced podcast and that the reminders to finger-point read would be well heeded.

However, during an observation period, the researcher realized that several students wanted to use an echo-reading technique (i.e. the teacher reads a line of text and then the student repeats that line of text) during the enhanced podcast rather than reading simultaneously with the narrator's voice on the enhanced podcast. The researcher also realized during the observation period that simple reminders to engage in finger-point reading were insufficient and direct modeling and monitoring by a teacher was required in order for all students to comply. One assumption made by the researcher that did turn out to be true was the students' ability to rapidly learn how to use the iPods. The researcher was surprised at how quickly most students gained control over all aspects of iPod use, and the researcher actually learned a few things about how to use the iPod from the students.

The action research project had many positive influences overall. The students learned a new skill, learned how to use a new learning center, and gained access to a powerful tool for increasing their reading fluency. The researcher learned how to incorporate a new form of technology into a learning center, gained many ideas of other applications of iPods in the classroom, and learned many helpful techniques for making podcasts more efficiently in the future. While the researcher's colleagues have not had any direct benefits from this research, there is potential in the future for the researcher to help colleagues incorporate this technology in their own classrooms.

Limitations

When looking at the results of this study, there are several limitations to consider. This research was conducted in one classroom, on a limited number of students, in a short amount of time. Although statistical references consulted by the researcher note that a sample size of ten is sufficient to produce reliable results, the researcher would feel more confident in the findings if

the research was conducted again in multiple classrooms, using a larger sample size, and over a period of several weeks or months.

While limitations exist, the researcher believes that the results of the research are important enough to warrant further research into the use of iPods as instructional tools. Because the results show significant increases in students' reading fluency, more research should be conducted in this area. Specifically, the effect of repeatedly listening to a story in a listening center, and how it affects each dimension of fluency (volume, pacing, etc) should be examined to better understand the relationships between the two.

In the future, the researcher would change several things when designing a new study. The researcher recommends:

- Using more than one classroom of students, in order to increase the sample size and create a control group with one classroom and a test group with another classroom. The control group would only receive traditional classroom instruction while the test group would use the iPods in addition to the traditional classroom instruction.
- Extending the research period to cover six to eight weeks, which would allow data to be collected at the beginning (baseline), at the mid-point (to compare progress of the two groups), and at the end (final results).
- Focus specifically on one or two dimensions of fluency, instead of multiple measures of reading accuracy, voice-print match accuracy, and fluency.
- Make an audio recording of each student's reading at each point in the data collection cycle, and have multiple teachers score each student's reading fluency with a rubric.
- Assess students' reading fluency using texts used during instruction and practice, and also a text that is different from the instructional texts. This would measure a student's

fluency on known text, as well as assess if the student was able to apply those skills in a new situation.

Future Plan of Action

The results of this study are clear in regard to the relationship between repeatedly listening to a story, practicing reading that story, and improvements in reading fluency when reading that story. Therefore, the researcher plans to continue creating enhanced podcasts to use in the iPod listening center in the classroom. Due to the overall success of the iPod listening center, the researcher also plans on investigating other ways the iPods can be used to help students develop and practice important emergent literacy skills. In particular, the researcher sees possibilities in the areas of vocabulary development and sight word recognition.

In addition to continuing the use of the iPod listening center in the classroom, the researcher plans on sharing the findings of the research with others educators. The findings will be shared with the researcher's PLC (Professional Learning Community) team during a team meeting. The researcher will also share the findings with her building principal, who is also the Director of Curriculum and Instruction. The researcher will provide a brief summary of the findings in her weekly newsletter to parents. Finally, the researcher has tentative plans to self-publish the findings on an educational blog.

In closing, the researcher set out to determine how listening to enhanced podcasts of stories on an iPod affected kindergarten students' reading skills. The researcher found that listening to stories in an iPod listening center had positive effects on the students' reading skills, especially their reading fluency. The researcher also determined that the iPod listening center was beneficial to use in the classroom due to the students' enthusiastic response to the iPods, as well as the speed at which they were able to independently use the listening center in a

successful manner. The researcher plans to continue the use of the iPod listening center in the classroom to provide students with a motivational way to independently practice their reading and improve their reading fluency.

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APPENDIX A

IRB Approval Letter
Received October 19, 2009

Researcher Name: Mary Koch

Your project titled “*Using Podcasting to Develop Voice-Print Match and Fluency in Kindergarten Readers*” has been reviewed by the Marian University Institutional Review Board for the Protection of Human Subjects (IRB). It has been determined that under rules governing protocol review, the project qualifies for expedited review and is approved for one year without modification.

1. If you should make any future changes in the protocol involving 1) method, 2) subjects, 3) informed consent, and/or 4) subject identification, you must submit a protocol modification. Contact the Office of Research and Sponsored Programs for instructions regarding protocol modification.
2. The case number assigned to this protocol is **L091010115Q**; please reference this number in all future correspondence. You are responsible for maintaining all records related to this project for at least three years after completion of the research project.
3. Your protocol approval is valid from 10/19/2009 to 10/18/2010. You will be required to submit an Annual Progress Report (APR) to the IRB. Before your protocol approval period ends, you will be sent an APR form, which must be completed and returned to the Office of Research and Sponsored Programs to disclose the status of the research. You are required to complete this form even if you have completed your research. You may also use this form to request extension of IRB approval for another year.

Please do not hesitate to contact the ORSP (orsp@marianuniversity.edu or 920-923-8976) if you have questions or require additional information.

MARC HEIMERL, IRB Secretary
Office of Research and Sponsored Programs
Marian University
45 S. National Avenue; Room R006
Fond du Lac, WI 54935
Telephone: 920-923-8796
Fax: 920-926-2114

www.marianuniversity.edu/irb

APPENDIX B



*Willow Glen Primary School
2600 East Bolivar Avenue
St. Francis, WI 53235
414-486-6300
www.wggators.org*

Site Coordinator Letter of Permission

October 1, 2009

Institutional Review Board
Marian University
45 S. National Avenue
Fond du Lac, WI 54935

Dear Institutional Review Board,

I hereby agree to allow Mary Koch and Jenna Linskens, from Marian University to conduct their research at Willow Glen Primary School, St. Francis, Wisconsin. I understand that the purpose of the study is to study the effect of technology integration in a primary classroom.

By signing this letter of permission, I am agreeing to the following:

- ☒ MU researcher(s) have permission to be on Willow Glen Primary School, St. Francis, Wisconsin premise.
- ☒ MU researcher(s) have unrestricted access to the data collected to perform the data analysis both for presentation to Willow Glen Primary School, St. Francis, Wisconsin and for publication purposes.

Sincerely,

A handwritten signature in cursive script that reads "Michelle Mancl".

Michelle Mancl, Principal
Willow Glen Primary School

APPENDIX C

Parental Consent Form

Marian University, School of Education

Study Title: Using Podcasting to Develop Voice-Print Match and Fluency in Kindergarten Readers

Researchers:

- *Mary Koch, K5 Teacher, Willow Glen Primary School, 414-486-6347, mkoch@wggators.org*
- *Jenna Linskens, Instructor, Marian University – School of Education, 920-923-8615, jalinskens67@marianuniversity.edu*

You are being asked to allow your child to take part in a research study carried out by *Mary Koch and Jenna Linskens*. Please read this form carefully, taking as much time as you need. Ask the researcher to explain anything you don't understand. This study has been approved for human subject participation by the Marian University Institutional Review Board (IRB).

You may refuse to give permission, or you may withdraw your permission for your child to be in the study, for any reason. Your child will also be asked if he or she would like to take part in this study. Even if you give your permission, your child can decide not to be in the study or to leave the study at any time.

What is this research study about?

This research study is being done to see if having children listen to podcasts (recordings) of stories helps them improve their reading skills.

We are asking your permission for your child to be in the study because he/she is in kindergarten.

Taking part in the study will take about 4 weeks. Your child will participate in the study as part of the regular instruction in the classroom.

What will my child be asked to do if he or she is in this research study?

If your child takes part in the study, he or she will be asked to listen to recorded versions of stories and read along in a book. Your child will listen to the recording using headphones and a portable audio player. Each recording lasts approximately five minutes and your child will listen to a recording two or three times during the week.

In addition to listening to the recordings, your child will be asked to read a simple book to the teacher at the beginning and ending of the 4 week time period. Your child will also be asked to answer a few interview questions about his or her experiences with listening to the recordings. This interview will take approximately 5 minutes to complete and will be completed during class.

Your child may refuse to read the book to the researcher. Your child may refuse to answer any of the questions during the interview.

Are there any benefits to my child if he or she is in this research study?

Your child may benefit from this study by having additional opportunities to practice his/her reading.

If your child takes part in this study, it may help others in the future.

Are there any risks to my child if he or she is in this research study?

The potential risk to your child from taking part in this study is a loss of confidentiality, although this is unlikely.

Students will be identified by code only and the code lists and data files will be kept in separate locations. All data collected for this study will be kept in a locked classroom and the data will only be accessible to the researchers.

Will information about my child be kept private?

The data for this study will be kept private and confidential to the extent allowed by federal and state law.

Students will be identified by code only and the code lists and data files will be kept in separate locations. All data collected for this study will be kept in a locked classroom and the data will only be accessible to the researchers.

The results of this study may be published or presented at professional meetings, but your child's name will not be used or associated with the findings. The data for this study will be kept for 3 years.

Are there any costs or payments for your child being in this research study?

There will be no costs to you or your child for taking part in this study.

You will not receive money or any other form of compensation for taking part in this study.

What are my child's rights as a research study volunteer?

Your child's participation in this study is completely voluntary. Your child may choose not to take part in this study, choose not to answer specific questions, or leave the study at any time. Your child will still take part in the regular classroom activities, but your child's information will not be used in the study.

There will be no penalty or loss of benefits to which you or your child are entitled if you choose not to give your permission for your child to take part or your child withdraws from the study.

Who can I talk to if I have questions?

If you have questions about this study or the information in this form, please contact the researchers:

- *Mary Koch, K5 Teacher, Willow Glen Primary School, 414-486-6347, mkoch@wggators.org*
- *Jenna Linskens, Instructor, Marian University – School of Education, 920-923-8615, jalinskens67@marianuniversity.edu*

If you have questions about your rights or your child's rights as a research participant, or would like to report a concern or complaint about this study, please contact the Marian University IRB Administrator at (920) 923-8796, or e-mail orosp@marianuniversity.edu, or regular mail at: Marian University ORSP, 45 S. National Avenue, Fond du Lac, WI 54935.

What does my signature on this consent form mean?

Your signature on this form means that:

- You understand the information given to you in this form
- You have been able to ask the researcher questions and state any concerns
- The researcher has responded to your questions and concerns
- You believe you understand the research study and the potential benefits and risks that are involved for your child.
- You understand that even if you give your permission, your child may choose not to take part in the study.

Study Title: Using Podcasting to Develop Voice-Print Match and Fluency in Kindergarten Readers

Researchers: *Mary Koch and Jenna Linskens*

Statement of Consent

I give my voluntary permission for my child to take part in this study. I will be given a copy of this consent document for my records.

Signature of Parent or Guardian

Date

Printed Name of Parent or Guardian

APPENDIX D

Student Assent Script

Marian University, School of Education

Study Title: Using Podcasting to Develop Voice-Print Match and Fluency in Kindergarten Readers

Researchers:

- *Mary Koch, K5 Teacher, Willow Glen Primary School, 414-486-6347, mkoch@wggators.org*
- *Jenna Linskens, Instructor, Marian University – School of Education, 920-923-8615, jalinskens67@marianuniversity.edu*

Assent Script

- My name is Mrs. Koch. I am going to school at Marian University.
- I am asking you to help me learn more about how listening to books on the headphones can help you be a better reader.
- Your parent knows I am going to ask you to help me, but you get to decide if you want to join in this study. It is up to you. If you decide to be in the study, I will ask you to use the headphones to listen to recordings of some books. I will also ask you to read some books to me and answer a few questions for me about what you thought about using the headphones and listening to stories.
- Taking part in this research study might help you by giving you more practice reading.
- If you decide to not be in the study, you can still listen to the stories on the headphones.
- Everything you say and do will be private. We won't tell your parents or anyone else what you say or do while you are taking part in the study. When we tell other people about what we learned in the study, we won't tell them your name or the name of anyone else who took part in the research study.
- You don't have to be in this study. It is up to you. You can say no now or you can change your mind later. No one will be upset if you change your mind.
- You can ask us questions anytime and you can talk to your parent any time you want.
- Do you have any questions now that I can answer for you?

APPENDIX F

NAME _____

FLUENCY RUBRIC

	1	2	3	4
Expression and Volume	Reads in a quiet voice as if to get words out. The reading does not sound natural like talking to a friend.	Reads in a quiet voice. The reading sounds natural in part of the text, but the reader does not always sound like they are talking to a friend.	Reads with volume and expression. However, sometimes the reader slips into expressionless reading and does not sound like they are talking to a friend.	Reads with varied volume and expression. The reader sounds like they are talking to a friend with their voice matching the interpretation of the passage.
Phrasing	Reads word-by-word in a monotone voice.	Reads in two or three word phrases, not adhering to punctuation, stress and intonation.	Reads with a mixture of run-ons, mid sentence pauses for breath, and some choppy sentences. There is reasonable stress and intonation.	Reads with good phrasing; adhering to punctuation, stress and intonation.
Smoothness	Frequently hesitates while reading, sounds out words, and repeats words or phrases. The reader makes multiple attempts to read the same passage.	Reads with extended pauses or hesitations. The reader has many "rough spots."	Reads with occasional breaks in rhythm. The reader has difficulty with specific words and/or sentence structures.	Reads smoothly with some breaks, but self-corrects with difficult words and/or sentence structures.
Pace	Reads slowly and laboriously.	Reads moderately slowly.	Reads fast and slow throughout reading.	Reads at a conversational pace throughout the reading.

Scores of 10 or more indicate that the student is making good progress in fluency.

Score _____

Scores below 10 indicate that the student needs additional instruction in fluency.

APPENDIX G

Student Attitude Interview

Directions: I am going to read you some sentences. For each sentence, you have to decide what you think.

If you agree with the sentence, you can color in the happy face. 😊

If you don't agree with the sentence, you can color in the unhappy face. ☹️

If you don't know either way, you can color in the plain face. 😐

Here is a question for you to try:

I like chocolate chip cookies.



Remember, if you like chocolate chip cookies, you can color in the happy face. If you don't like chocolate chip cookies, you can color in the sad face, and if you are not sure, you can color in the plain face.

Now we will start with the interview questions.

I liked listening to the stories on the headphones.



I liked having my teacher's voice help me read the stories.



My teacher's voice helped me remember to point to the words on the page.



Listening to the stories on the headphones helped me be a better reader.



Appendix H

Table H1

Running Record Data				
Phase 1				
	Correct Words	Reading Accuracy	Correct VPM	VPM Accuracy
S1	0	0.0%	6	20.7%
S2	27	93.1%	29	100.0%
S3	28	96.6%	16	55.2%
S4	21	72.4%	6	20.7%
S5	29	100.0%	29	100.0%
S6	27	93.1%	23	79.3%
S7	28	96.6%	29	100.0%
S8	29	100.0%	24	82.8%
S9	26	89.7%	11	37.9%
S10	29	100.0%	29	100.0%

Table H2

Fluency Rubric Scores					
Phase 1					
	Expression/Volume	Phrasing	Smoothness	Pace	Overall Score
S1	2	1	1	1	5
S2	1	1	3	2	7
S3	3	1	2	2	8
S4	1	2	2	2	7
S5	2	1	3	2	8
S6	2	2	1	2	7
S7	4	3	3	2	12
S8	3	3	3	2	11
S9	2	2	2	2	8
S10	3	1	2	2	8

Appendix I

Table I1

Running Record Results				
Phase 2				
	Correct Words	Reading Accuracy	Correct VPM	VPM Accuracy
S1	21	70.0%	4	13.3%
S2	30	100.0%	28	93.3%
S3	28	93.3%	29	96.7%
S4	14	46.7%	8	26.7%
S5	30	100.0%	7	23.3%
S6	23	76.7%	24	80.0%
S7	30	100.0%	10	33.3%
S8	29	96.7%	6	20.0%
S9	30	100.0%	7	23.3%
S10	30	100.0%	30	100.0%

Table I2

Fluency Rubric Scores					
Phase 2					
	Expression/Volume	Phrasing	Smoothness	Pace	Overall Score
S1	2	3	2	3	10
S2	3	3	4	3	13
S3	3	2	2	2	9
S4	1	2	3	2	8
S5	2	3	3	3	11
S6	1	2	2	2	7
S7	3	3	4	4	14
S8	3	3	4	4	14
S9	2	2	2	2	8
S10	2	3	4	4	13

APPENDIX K

Transcript of Field Journal NotesPhase 1*November 2nd*

In advance of introducing the iPods in small group lessons, I set up the center. I put one iPod in each hanging Ziploc bag, along with a set of headphones. Each bag was loaded with video podcasts found on iTunes: 2 Hooked on Phonics podcasts, and 3 Sesame Street: Word on the Street podcasts.

I taught the kids about general iPod usage: turning on and off, scrolling up and down through menu, and plugging in the headphones. I wasn't real clear on how to scroll up and down through the menus (as the directions weren't clear) and I couldn't get it to work very well. 2 minutes into the first group, one of the kids showed me how and there were no problems teaching it from that point on.

8 out of the 10 students in the study had no trouble with the scrolling. 2 of the students still had difficulty holding the iPod in their right hand and using their thumb to navigate the white dial. That made me wonder whether kids with fine-motor issues might find using the iPods more challenging.

Overall the students were very excited to be using the iPods and loved being able to watch the video podcasts from Hooked on Phonics and Sesame Street Word on the Street.

At the end of the mini-lesson I modeled how to turn off the iPods, put them away in the bag, and hang them up on the rack. Press and hold to turn off the iPod seemed to be a difficult concept for 3 of them.

I conducted a whole group questioning/feedback session at the end of center time. The students gave great feedback. They all indicated that they liked using the iPods. 7 of the research group said they had iPods at home (parents had them) and 3 said they had used the iPod themselves. 5 kids remembered a vocabulary word from Word on the Street.

November 3th

I had kids practice scrolling up and down on the menu screen and how to access the sub-menus. Students had to show me they could successfully navigate on the iPod before they were able to use them independently to watch the video podcasts. I had to give reminders to make sure headphones were plugged all the way in, as 4 students were listening through the external

speaker and not the headphones. I also had to give reminders about putting the iPods back in bags gently, and model how to not let them drop into bag and hit the table.

During the practice time, some issues arose with volume and not being able to hear. I showed them how to adjust the volume up and down, and had each student practice doing that.

An issue has also come up with the shared headphones. Due to concerns about lice, the school nurse has decreed that each student must use his/her own personal headphones. Will have to reengineer the headphone component and go to individual headphones for each student.

I conducted a brief feedback session after center time today with a thumbs up/thumbs down response. All 10 students reported liking the iPod center and all 10 students reported liking the video podcasts.

November 6th

Individual headphones are now in labeled Ziploc bags. During small group instruction today, I taught the students the procedure for getting their own individual headphones, using them with the iPods and putting them away properly.

Students had time today to use the iPods independently. 4 iPods experienced a drained battery during use. Because video podcasts take more power, the iPods will have to be charged regularly.

Before the students used the center today, I added two more Hooked on Phonics video podcasts. The procedure for doing this is fairly straightforward and took about 10 minutes total. One issue I have come across is that I can't access the podcasts on iTunes at school, due to our internet security software. Fortunately, I have a laptop so I can take it home and update my iTunes library easily at home.

I noticed today that the students really help each other out with using the iPods. Despite being plugged in, they interact with each other during the center time and a few even tried to watch the same podcasts at same time. Perhaps getting an adaptor so that 2 sets of headphones could be plugged into one iPod would be a good thing. Perhaps there would be more interaction and talk this way.

November 10th

Students had more independent practice today. I encouraged the students to help each other out instead of interrupting me.

Talked about iPods at end of centers today – asked kids what they thought of the iPods and also if they felt they needed more practice. Comments included:

“terrific” – no practice needed (I agree with student self-assessment)

“fun” – no practice needed (I disagree with student self-assessment)

“liked listening to the letter song “ – no practice needed (I agree)

“cool” – need more practice with iPod (I agree)

Other informal questioning: 3 students feel they need more practice using the iPods, 9 report having an iPod in the home.

Phase 2

November 16th

In advance of introducing the enhanced podcasts in small group lessons, I modified the iPod center a bit. I put one iPod in each hanging Ziploc bag, along with a copy of the book we are using during instruction. I loaded my enhanced podcasts of the nursery rhyme onto each iPod and also loaded 3 new Hooked on Phonics podcasts, and 3 new Sesame Street: Word on the Street podcasts. I also deleted the video podcasts that were used during Phase 1.

I did small group lessons today to teach students how to use iPods to listen to enhanced podcast. This proved to be a little more difficult for them than accessing the video podcasts simply because they have to make sure they are listening to the podcasts that matches the book they are reading.

Because the enhanced podcasts was something new, and because I wanted them to understand how it worked and how they needed to participate. I played the podcast for them on an iPod speaker rather than having them listen to it individually. This allowed me to ensure the students understood their role at the center and make sure that they knew they had to listen to my instructions during the podcast.

During the lesson, I assisted kids with finding the right title and showed how to match title of the book with title of podcast. Because the title scrolls on the screen, it proved to be challenging for 3 of the students.

November 18th

Today was the first day for the students to actually use the iPod center to practice reading. 5 of the students expressed desire to go right to the video podcasts and did not seem enthusiastic about the reading practice. I told them they could use the video podcasts after they completed reading the book all 3 times (until the end of the podcast).

4 students are still having trouble navigating and finding the podcast for the book. In all 4 groups, I noticed some students turning a peer for tech support instead of coming to me.

I also noticed 4 students who wanted to echo read rather than read along with the book. In the future, this could be another kind of enhanced podcast.

One area of concern was the pace of the podcast. I wanted to make sure that students had enough time to turn the page. After observing the center time today, it seems as if students do have enough time to turn the page.

November 19th

After noticing that some students were having difficulty navigating the main menu, I discovered a way to modify the main menu on the iPod so that there weren't so many choices on the menu. This seemed to make it easier for the students to find the podcast of the story. 1 student still required considerable assistance.

The video podcasts are proving to be very popular and a good reward too. Several kids were singing along with the songs today and I had to give more than one reminder about the volume of their singing.

At the end of center time today, I held a feedback session to get some ideas about what the students' thoughts were about the iPod center. Here's what they said:

"Helping us read."

"Help us read books."

"Help us know other words."

"Songs help us learn"

"I like the ABC song"

When asked if the podcast helps them remember to finger-point, 8 students said yes. Most students agreed that the reminders I gave on the podcast were helpful. Most students agreed that there was enough time to turn the pages, and most agreed that having podcasts of other little books to practice reading would be a good thing.

November 20th

Today students went to the iPod center with the expectation that they would use it independently. I encouraged students to ask each other for help, rather than coming to me for assistance. I was interrupted 3 times for assistance during center time. In all three cases, the student had managed to get into the Setting menu and reset the main menu back to the default settings.

As students used the center, I made some observations on what they were doing in the center. I wanted to see if they were actually performing finger-point reading as the directions on the podcast were instructing them to do. I also wanted to see if they were reading aloud during the

last read of the story. 3 out of 10 students exhibited finger-point reading while listening to the podcast. 6 out of 10 students were observed reading along out loud while listening to the podcast. Overall, students seem to be able to keep up with the pace of the book and the time between pages seems to be good, neither too long nor too short.